ANDREWS
ENGINEERING, INC.

June 1, 2011

Mr. Stephen F. Nightingale, P.E.
Permit Section Manager
Bureau of Land
Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. Box 19276
Springfield, IL 62794-9276

Re: 2018080001 – Winnebago County
Winnebago Landfill – Northern and Southern Units
Permit No. 1991-138-LF
Revised Closure/Post-Closure Care Cost Estimates

Dear Mr. Nightingale:

On behalf of our client, Winnebago Landfill, submitted herein is an application for significant modification to permit to revise the closure and post-closure care cost estimates. The required application forms (Certification of Authenticity and LPC-PA1) are provided in Appendix A.

The current permitted closure and post-closure care cost estimate of $6,132,512.07 was approved on October 27, 2010 via Log No. 2010-270 (Modification No. 45). The revised cost estimate of $6,269,233.05 provided in Appendix B reflects various changes to the total estimated closure and post-closure care costs.

The attached cost estimate revision updates the existing costs for inflation required by Permit Condition X.8. The inflationary increase was completed by multiplying the existing approved unit costs by the recommended inflation multiplier of 1.01 as specified by the Illinois EPA Financial Assurance Unit.

Please contact Tom Hilbert at (815) 963-7516 if you have any questions or require additional information.

Respectfully,

Teresa N. Sharp
Environmental Scientist

TNS:tns:slm

Enclosures

cc: Tom Hilbert – Rock River Environmental Services
Bernie Shorle – US EPA Region 5

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Applications

Appendix A

Certification of Authenticity and LPC PA-1 Forms

Illinois Environmental Protection Agency

Bureau of Land • 1021 N. Grand Avenue E. • Box 19276 • Springfield • Illinois • 62794-9276

General Application for Permit
(LPC - PA1)

This form must be used for any application for permit, except for landscape waste composting or hazardous waste management facilities regulated in accordance with RCRA, Subtitle C from the Bureau of Land. One original, and two copies, or three if applicable, of all permit application forms must be submitted. Attach the original and appropriate number of copies of any necessary plans, specifications, reports, etc. to fully support and describe the activities and modifications being proposed. Attach sufficient information to demonstrate the compliance with all regulatory requirements. Incomplete applications will be rejected.

Niote: Permit applications which are hand-deliverd to the Bureau of Land, Permit Section must be delivered to the above address between 8:30 am and 5:00 pm, Monday through Friday (excluding State holidays).

NOTE: Please complete this form online, save a copy locally, print and submit it to the Permit Section #33, at the above address.

I. Site Identification:

Site Name: Winnebago Landfill IEPA ID Number: 2018080001

Street Address: 8403 Lindenwood Road P.O. Box: _____

City: Rockford State: IL Zip Code: 61109 County: Winnebago

Existing DE/OP Permit Numbers (if applicable): 1991-138-LF

2. Owner/Operator Identification:

Owner		Operator	
Name:	Winnebago Landfill Company, LLC	Name:	Winnebago Reclamation Service, Inc.
Street Address:	5450 Wansford Way, Suite 201B	Street Address:	5450 Wansford Way, Suite 201B
PO Box:		PO Box:	
City:	Rockford State: IL	City:	Rockford State: IL
Zip Code:	61109 Phone:	Zip Code:	61109 Phone:
Contact:	Tom Hilbert	Contact:	Tom Hilbert
Email Address:	thilbert@rresvcs.com	Email Address:	thilbert@rresvcs.com

TYPE OF SUBMISSION/REVIEW PERIOD:

- ☐ New Landfill/180 days (35 IAC Part 813)
- ☐ Landfill Expansion/180 days (35 IAC Part 813)
- ☐ Sig. Mod. to Operate/90 days (35 IAC Part 813)
- ☐ Other Sig. Mod./90 days (35 IAC Part 813)
- ☐ Renewal of Landfill/90 days (35 IAC Part 813)
- ☐ Developmental/90 days (35 IAC Part 807)
- ☐ Operating/45 days (35 IAC Part 807)
- ☐ Supplemental/90 days (35 IAC Part 807)
- ☐ Permit Transfer/90 days (35 IAC Part 807)
- ☐ Renewal of Experimental Permit (35 IAC Part 807)

TYPE OF FACILITY:

- ☑ Landfill
- ☐ Land Treatment
- ☐ Transfer Station
- ☑ Treatment Facility
- ☐ Storage
- ☐ Incinerator
- ☐ Composting
- ☐ Recycling/Reclamation
- ☐ Other (Specify)

TYPE OF WASTE:

- ☑ General Municipal Refuse
- ☐ Hazardous
- ☑ Special (Non-Hazardous)
- ☐ Chemical Only (exec. putrescible)
- ☐ Inert Only (exec. chem. & putrescible)
- ☐ Used Oil
- ☐ Potentially Infectious Medical Waste
- ☐ Landscape/Yard Waste
- ☐ Other (Specify)

3. Description of this Permit Request:

Annual Closure and Post-Closure Care Cost Estimates in accordance with Condition X.8 (Modification No. 46).

4. Completeness Requirements

The following items must be checked Yes, No or N/A. Each item will be reviewed for completeness by the log clerk. Blank items will result in rejection of the application. Please refer to the instructions for further guidance.

1. Have all required public notice letters been mailed in accordance with the LPC-PA16 instructions? ☑ Yes ☐ No ☐ N/A

   (If so, provide a list of those recipients of the required public notice letters for Illinois EPA retention. Such retention shall not imply any Illinois EPA review and/or confirmation of the list.)

Public Notice Recipients

Name: Dave Syverson Title: Senator - District 34
Street Address: 200 South Wyman Street, Suite 302 P.O. Box:
City: Rockford State: IL Zip Code: 61101 Phone:

Name: Charles Jefferson Title: Representative - District 67
Street Address: 200 South Wyman Street, Suite 304 P.O. Box:
City: Rockford State: IL Zip Code: 61101 Phone:

Name: Joseph Bruscato Title: State's Attorney
Street Address: 400 West State Street P.O. Box:
City: Rockford State: IL Zip Code: 61101 Phone:

Name: Scott Christiansen Title: County Chairman
Street Address: 404 Elm Street, Room 504 P.O. Box:
City: Rockford State: IL Zip Code: 61101 Phone:

Name: Village of New Milford Title: Village Clerk
Street Address: 6771 11th Street P.O. Box:
City: Rockford State: IL Zip Code: 61109 Phone:

Name: Village of Davis Junction Title: Village Clerk
Street Address: 106 North Elm Street P.O. Box: 207
City: Davis Junction State: IL Zip Code: 61020 Phone:

Name: Cherry Valley Township Title:
Street Address: 487 South Blackhawk Road P.O. Box:
City: Rockford State: IL Zip Code: 61109 Phone:

2. a. Is the Siting Certification Form (LPC-PA8) completed and enclosed? ☐ Yes ☑ No ☐ N/A

   b. Is siting approval currently under litigation? ☐ Yes ☐ No ☑ N/A

3. a. Is a closure, and if necessary a post-closure plan covering these activities being submitted, or ☐ Yes ☑ No ☐ N/A

   b. has one already been approved? If yes, provide the permit number: 1991-138-LF

4. a. For waste disposal sites, only: Has any employee, owner, operator, officer or director of the owner or operator had a prior conduct certification denied, canceled or revoked? ☐ Yes ☑ No ☐ N/A

   b. Have you included a demonstration of how you comply or intend to comply with 35 Ill. Adm. Code 745? ☐ Yes ☑ No ☐ N/A

5. a. Is land ownership held in beneficial trust? ☐ Yes ☑ No ☐ N/A

   b. If yes, is a beneficial trust certification form (LPC-PA9) completed and enclosed? ☐ Yes ☐ No ☑ N/A

6. a. Does the application contain information or proposals regarding the hydrogeology; groundwater monitoring, modeling or classification; a groundwater impact assessment; or vadose zone monitoring for which you are requesting approval? ☐ Yes ☑ No ☐ N/A

   b. If yes, have you submitted a third copy of the application (4 total) and supporting documents? ☐ Yes ☐ No ☑ N/A

5. Signatures:

Original signatures are required. Signature stamps or applications transmitted electronically or by FAX are not acceptable.

All applications shall be signed by the person designated below as a duly authorized representative of the owner an/or operator.

Corporation - By a principal executive officer of the level of vice-president or above.
Partnership or Sole Proprietorship - By a general partner or the proprietor, respectively.
Government - By either a principal executive officer or a ranking elected official.

A person is a duly authorized representative of the owner and operator only if:

1. They meet the criteria above or the authorization has been granted in writing by a person described above; and
2. Is submitted with this application (a copy of a previously submitted authorization can be used).

I hereby affirm that all information contained in this application is true and accurate to the best of my knowledge and belief. I do herein swear that I am a duly authorized representative of the owner/operator and I am authorized to sign this permit application form.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Owner Signature: _____ Date: 5-9-2011

Printed Name: Thomas Hilbert Title: Engineering Manager

Notary: Subscribed and Sworn before me this _____ day of _____ 20___.

My commission expires on: _____

Signature & Stamp/Seal of Notary Public

Operator Signature: _____ Date: 5-9-2011

Printed Name: Thomas Hilbert Title: Engineering Manager

Notary: Subscribed and Sworn before me this 9th day of May 2011.

My commission expires on: March 30, 2012

Signature & Stamp/Seal of Notary Public

OFFICIAL SEAL
LAUNA K. JOHNSON
NOTARY PUBLIC STATE OF ILLINOIS
My Commission Expires March 30, 2012

Engineer's Name: Jeremy C. Poetzscher Engineer's Title: Project Engineer

Company: Andrews Engineering, Inc. Registration Number: 062-061274

Street Address: 3300 Lindbergh Creek Drive PO Box: _____

City: _____ State: _____ Zip Code: 62711 Phone: [illegible]

Email Address: jpoetzscher@andrews-eng.com License Expiration Date: 11/30/2011

Signature: _____ Date: 6/1/2011 Professional Engineer's Seal:

JEREMY C. POETZSCHER
062.061274
LICENSED PROFESSIONAL ENGINEER
OF ILLINOIS

Illinois
Environmental
Protection Agency

Bureau of Land
1021 North Grand Avenue East
Box 19276
Springfield, IL 62794-9276

Certification of Authenticity of Official Forms

This form must accompany any application submitted to the Illinois EPA Bureau of Land, Division of Land Pollution Control, Permit Section on forms other than the official copy printed and provided by the Illinois EPA. The only allowed changes to the form are in spacing, fonts, and the addition of the information provided. Any additions must be underlined. The forms would not be considered identical if there is any change to, addition or deletion of words on the form or to the language of the form.

The same individuals that sign the application form it accompanies must sign the following certification.

I hereby certify under penalty of law that I have personally examined, and am familiar with the application form or forms and all included supplemental information submitted to the Illinois EPA herewith, and that the official Illinois Environmental Protection Agency application form or forms used herein is or are identical in all respects to the official form or forms provided by the Illinois EPA Bureau of Land Permit Section, and has not or have not been altered, amended, or otherwise modified in any way. I further certify under penalty of law that any attached or included electronic data version of the application form or forms complies with the official Illinois EPA's Electronic version thereof, and is or are identical in all respects to the official electronically downloadable form or forms provided by the Illinois EPA Bureau of Land Permit Section, and has not or have not been altered, amended or otherwise modified in any way.

By: _____ 5-9-2011
Owner Signature (date)

Engineering Manager
Title

By: _____ 5-9-2011
Operator Signature (date)

Engineering Manager
Title

_____ 6/1/2011
Engineer Signature (date)
(if necessary)

Subscribed and Sworn to Before Me,
a Notary Public in and for the
above-mentioned County and State.

_____
Notary Public

My Commission Expires: March 30, 2012

OFFICIAL SEAL
LAUNA K. JOHNSON
NOTARY PUBLIC STATE OF ILLINOIS
My Commission Expires March 30, 2012
(Notary Seal)

Appendix B

Proposed Closure, Post-Closure Cost Estimate

Winnebago Landfill
Northern and Southern Units
Closure/Post-Closure Care
Financial Assurance Summary
Effective Date: 5/26/2011

Northern Unit Closure Cost	$	-
Northern Unit Post Closure Care Costs	$	1,656,190.66
Total Northern Unit Costs	$	**1,656,190.66**
Southern Unit Closure Cost	$	2,323,172.58
Southern Unit Post Closure Care Costs	$	955,475.55
Total Southern Unit Costs	$	**3,278,648.13**
Southern Unit Expansion Closure Cost	$	1,137,135.84
Southern Unit Expansion Post Closure Care Costs	$	197,258.42
Total Southern Unit Costs	$	**1,334,394.26**
Total Closure & Post Closure Costs	$	**6,269,233.05**

Note 1: All pricing was adjusted for inflation of 1.01% on May 26, 2011
Inflation multiplier from IEPA-BOL-Planning and Reporting of 1.01 (CY2010)

Table 1
Winnebago Landfill
Northern Unit
Post Closure Care Cost Estimate

Component	Costs		
	Yrs 1-5	Yrs 6 - 10	Yrs 11 - 30
Item 1 - Inspections			
Item 1.1 - Quarterly Inspections (Years 1-5) 4 hours / inspection @ $ 55.37 per hour	$ 885.89		
Item 1.2 - Annual Inspections (Years 6-30) 4 hours / inspection @ $ 55.37 per hour		$ 221.47	$ 221.47
Item 2 - Cover Maintenance			
Item 2.1 - Cover Repair 31.59 acres @ 1 % @ 1ft. 510 c.y. 510 c.y. @ $ 2.30 per c.y.	$ 1,171.25	$ 1,171.25	$ 1,171.25
Item 3 - Vegetation Maintenance			
Item 3.1 - Vegetation Repair 31.59 acres @ 2 % @ $ 1,253.53 per ac.	$ 791.98	$ 791.98	$ 791.98
Item 4 - Mowing			
Item 4.1 - Annual Mowing 31.6 acres @ $ 33.17 per ac.	$ 1,047.77	$ 1,047.77	$ 1,047.77
Item 5 - Assessment Groundwater Monitoring			
Item 5.1 - Routine Assessment Monitoring Sampling Cost 1 hrs/well @ 0 wells = 0 hrs 0 hrs @ $ 33.17 per hr = $ - $ - per event x 3 events per year = $ -	$ -	$ -	$ -
Item 5.2 - Annual Assessment Monitoring Sampling Cost 1.5 hrs/well @ 0 wells = 0 hrs 0 hrs @ $ 33.17 per hr = $ - $ - per event x 1 event per year = $ -	$ -	$ -	$ -
Item 5.3 - Routine Assessment Monitoring Analytical Cost 0 wells @ $ 158.15 per well = $ - per qtr. $ - per qtr. X 3 qtrs per year = $ -	$ -	$ -	$ -
Item 5.4 - Annual Assessment Monitoring Analytical Cost 0 wells @ $ 187.20 per well = $ - per qtr. $ - per qtr. X 1 qtrs per year = $ -	$ -	$ -	$ -

Table 1
Winnebago Landfill
Northern Unit
Post Closure Care Cost Estimate

Component			Costs		
			Yrs 1-5	Yrs 6 - 10	Yrs 11 - 30
Item 6 - Detection Groundwater Monitoring					
Item 6.1 - Routine Detection Monitoring Sampling Cost					
1 hrs/well @	33 wells =	33 hrs			
33 hrs @ $ 33.17 per hr =		$ 1,094.54			
$ 1,094.54 per event x 4 events per year =		$ 4,378.15	$ 4,378.15	$ 4,378.15	$ 4,378.15
Item 6.2 - Semi-Annual Detection Monitoring Sampling Cost					
1.5 hrs/well @	33 wells =	49.5 hrs			
49.5 hrs @ $ 33.17 per hr =		$ 1,641.81			
$ 1,641.81 per event x 2 event per year =		$ 3,283.61	$ 3,283.61	$ 3,283.61	$ 3,283.61
Item 6.3 - Routine Detection Monitoring Analytical Cost					
33 wells @ $ 158.15 per well =		$ 5,219.04 per qtr.			
$ 5,219.04 per qtr. X 4 qtrs per year =		$ 20,876.15	$ 20,876.15	$ 20,876.15	$ 20,876.15
Item 6.4 - Semi-Annual Detection Monitoring Analytical Cost					
33 wells @ $ 187.20 per well =		$ 6,177.64 per qtr.			
$ 6,177.64 per qtr. X 2 qtrs per year =		$ 12,355.28	$ 12,355.28	$ 12,355.28	$ 12,355.28
Item 7 - Gas Monitoring					
Item 7.1 - Monthly Ambient Air Monitoring Cost					
0.5 hrs/well @	2 wells =	1 hrs			
1 hrs @ $ 33.17 per hr =		$ 33.17			
$ 33.17 per event x 12 events per year =		$ 398.01	$ 398.01		
Item 7.2 - Quarterly Ambient Air Monitoring Cost					
0.5 hrs/well @	2 wells =	1 hrs			
1 hrs @ $ 33.17 per hr =		$ 33.17			
$ 33.17 per event x 4 events per year =		$ 132.67		$ 132.67	$ 132.67
Item 7.3 - Monthly Gas Monitoring Cost					
0.25 hrs/well @	13 wells =	3.25 hrs			
3.25 hrs @ $ 22.20 per hr =		$ 72.15			
$ 72.15 per event x 12 events per year =		$ 865.82	$ 865.82		
Item 7.4 - Quarterly Gas Monitoring Cost					
0.25 hrs/well @	13 wells =	3.25 hrs			
3.25 hrs @ $ 22.20 per hr =		$ 72.15			
$ 72.15 per event x 4 events per year =		$ 288.61		$ 288.61	$ 288.61
Item 7.5 - Gas System Maintenance					
48 hrs @ $ 55.37 per hr			$ 2,657.68	$ 2,657.68	$ 2,657.68
Item 8 - Leachate Monitoring					
Item 8.1 - Semi-Annual Leachate Sampling Cost					
1.5 hrs/well	1 well	1.5 hrs			
1.50 hrs @ $33.17 per hr =		$ 49.75			
$ 49.75 per event x 2 events per year =		$ 99.50	$ 99.50	$ 99.50	$ 99.50
Item 8.2 - Semi-Annual Leachate Monitoring Cost					
1 wells @ $ 1,229.35 per well =		$ 1,229.35 per event			
$ 1,229.35 per event X 2 events per year =		$ 2,458.71	$ 2,458.71	$ 2,458.71	$ 2,458.71

Table 1
Winnebago Landfill
Northern Unit
Post Closure Care Cost Estimate

Component	Costs		
	Yrs 1-5	Yrs 6 - 10	Yrs 11 - 30
Item 9 - Leachate Management			
Item 9.1 - Leachate Treatment 2,833 c.f. x 7.48 gal/c.f. = 21,191 gal. 21,191 gal @ 0.00204424 $/gal	$ 43.32	$ 43.32	$ 43.32
Item 9.2 - Leachate System Cleaning $ 3,342.74 per cleaning every 5 years	$ 668.55	$ 668.55	$ 668.55
Item 9.3 - Leachate Pump Replacement $ 6 pumps @ $ 3,066.36 per pump replaced every 5 years	$ 3,679.63	$ 3,679.63	$ 3,679.63
Annual Totals	$ 55,661.30	$ 54,154.33	$ 54,154.33
Number of Years	5	5	20
Sub-Total Post Closure Care Cost Northern Unit	$		1,632,164.70
Item 10 - Well Decommisioning			
Item 9.1 - Groundwater Well Decommision Cost 33 Wells @ $522.30 per well =			$17,236.01
Item 9.2 - Dewatering Well Decommision Cost 0 Wells @ $1,277.50 per well =			$0.00
Item 9.3 - Gas Probe Decommision Cost 13 Wells @ $522.30 per well =			$6,789.94
Total Post Closure Care Cost Northern Unit	$		1,656,190.66

Table 2
Winnebago Landfill
Southern Unit
Premature Closure Cost Estimate

Component					Costs
Item 1 - Drainage Control					
Item 1.1 - Miscellaneous Backfill - Excavate, Haul, and Place	2,000 c.y. @	$	2.61	per c.y.	$ 5,223.03
Item 1.2 - Clay Berm - Haul and Place	n/a c.y. @	$	3.29	per c.y.	$ -
Item 2 - Final Cover					
Item 2.1 - Low Permeability Layer	44,609 c.y. @	$	3.29	per c.y.	$ 146,785.30
Item 2.2 - Protective Soil Layer	111,522 c.y. @	$	2.30	per c.y.	$ 256,291.80
Item 2.3 - Topsoil Layer	22,304 c.y. @	$	2.61	per c.y.	$ 58,248.14
Item 2.4 - 40 mil LDPE Geomembrane	1,204,434 s.f. @	$	0.42	per s.f.	$ 503,263.90
Item 2.5 - Geocomposite Drainage Layer	1,204,434 s.f. @	$	0.50	per s.f.	$ 603,916.68
Item 3 - Vegetation					
Item 3.1 - Fertilize, Seed and Mulch Landfill	27.65 ac @	$	1,253.53	per ac.	$ 34,660.05
Item 3.2 - Apply Topsoil to other Undeveloped Areas	7502 c.y. @	$	2.61	per c.y.	$ 19,591.60
Item 3.3 - Fertilize, Seed, and Mulch Undeveloped Areas	9.3 ac @	$	1,253.53	per ac.	$ 11,657.81
Item 4 - Gas Probes					
Item 4.1 - Install Additional Gas Monitoring Probes	0 probes @	$	1,149.07	$ / probe	$ -
Item 4.2 - Install Additional Ambient Air Monitor	0 monitor @	$	261.15	$ / monitor	$ -
Item 5 - Active Gas Management System					
Item 5.1 - Active Gas Well Installation	24 wells @ 50 ft. /well @	$	114.91	$ / ft.	$ 137,888.08
Item 5.2 - Install Additional Header Piping	7000 ft. @	$	36.04	$ / ft.	$ 252,279.66
Item 5.3 - Abandon Leachate Recirculation Header	Lump Sum for System				$ 511.06
Item 6 - Inspection and Certification					
Item 6.1 - Construction Engineering Inspection	27.65 ac @	$	9,401.46	$ / ac.	$ 259,950.36
Item 6.2 - Construction Acceptance Report	Lump Sum for Report				$ 32,905.11
Total Southern Unit Premature Closure Costs					**$ 2,323,172.58**

Table 3
Winnebago Landfill
Southern Unit
Post Closure Care Cost Estimate

Component	Costs		
	Yrs 1-5	Yrs 6 - 15	Yrs 16 - 30
Item 1 - Inspections			
Item 1.1 - Quarterly Inspections (Years 1-5) 4 hours / inspection @ $ 55.37 per hour	$ 885.89		
Item 1.2 - Annual Inspections (Years 6-30) 4 hours / inspection @ $ 55.37 per hour		$ 221.47	$ 221.47
Item 2 - Cover Maintenance			
Item 2.1 - Cover Repair 27.65 acres @ 1 % @ 1ft. 446 c.y. 446 c.y. @ $ 2.30 per c.y.	$ 1,025.17	$ 1,025.17	$ 1,025.17
Item 3 - Vegetation Maintenance			
Item 3.1 - Vegetation Repair 27.65 acres @ 2 % @ $ 1,253.53 per ac.	$ 693.20	$ 693.20	$ 693.20
Item 4 - Mowing			
Item 4.1 - Annual Mowing 27.7 acres @ $ 33.17 per ac.	$ 917.09	$ 917.09	$ 917.09
Item 5 - Detection Groundwater Monitoring			
Item 5.1 - Routine Detection Monitoring Sampling Cost 1 hrs/well @ 15 wells = 15 hrs 15 hrs @ $ 33.17 per hr = $ 497.52 $ 497.52 per event x 3 events per year = $ 1,492.55	$ 1,492.55	$ 1,492.55	$ 1,492.55
Item 5.2 - Semi-Annual Detection Monitoring Sampling Cost 1.5 hrs/well @ 15 wells = 22.5 hrs 22.5 hrs @ $ 33.17 per hr = $ 746.28 $ 746.28 per event x 1 event per year = $ 746.28	$ 746.28	$ 746.28	$ 746.28
Item 5.3 - Routine Detection Monitoring Analytical Cost 15 wells @ $ 158.15 per well = $ 2,372.29 per qtr. $ 2,372.29 per qtr. X 4 qtrs per year = $ 9,489.16	$ 9,489.16	$ 9,489.16	$ 9,489.16
Item 5.4 - Semi-Annual Detection Monitoring Analytical Cost 15 wells @ $ 187.20 per well = $ 2,808.02 per qtr. $ 2,808.02 per qtr. X 2 qtrs per year = $ 5,616.04	$ 5,616.04	$ 5,616.04	$ 5,616.04

Table 3
Winnebago Landfill
Southern Unit
Post Closure Care Cost Estimate

Component				Costs		
Item 6 - Gas Monitoring						
Item 6.1 - Monthly Ambient Air Monitoring Cost						
0.5 hrs/well @	2 wells =		1 hrs			
1 hrs @	$ 33.17 per hr =	$	33.17			
$ 33.17 per event x 12 events per year =		$	398.01	$ 398.01		
Item 6.2 - Quarterly Ambient Air Monitoring Cost						
0.5 hrs/well @	2 wells =		1 hrs			
1 hrs @	$ 33.17 per hr =	$	33.17			
$ 33.17 per event x 4 events per year =		$	132.67		$ 132.67	$ 132.67
Item 6.3 - Monthly Gas Monitoring Cost						
0.25 hrs/well @	34 wells =		8.5 hrs			
8.5 hrs @	$ 22.20 per hr =	$	188.70			
$ 188.70 per event x 12 events per year =		$	2,264.45	$ 2,264.45		
Item 6.4 - Quarterly Gas Monitoring Cost						
0.25 hrs/well @	12 wells =		3 hrs			
3 hrs @	$ 22.20 per hr =	$	66.60			
$ 66.60 per event x 4 events per year =		$	266.41		$ 266.41	$ 266.41
Item 6.5 - Gas System Maintenance						
48 hrs @	$ 55.37 per hr			$ 2,657.68	$ 2,657.68	$ 2,657.68
Item 7 - Leachate Monitoring						
Item 7.1 - Semi-Annual Leachate Monitoring						
2 wells @	$ 1,229.35 per well =	$	2,458.71 per qtr.			
$ 2,458.71 semi-annual X 2 per year =		$	4,917.42	$ 4,917.42	$ 4,917.42	$ 4,917.42
Item 7.2 - Semi-Annual Leachate Sampling Cost						
1.5 hrs/well @	1 wells =		1.5 hrs			
1.5 hrs @	$ 33.17 per hr =	$	49.75			
$ 49.75 per event x 2 events per year =		$	99.50	$ 99.50	$ 99.50	$ 99.50
Item 8 - Leachate Management						
Item 8.1 - Leachate Treatment						
47,180 c.f. x 7.48 gal/c.f. =	352,906 gal.					
352,906 gal @	0.00204424 $/gal			$ 721.43	$ 721.43	$ 721.43
Item 8.2 - Leachate System Cleaning						
$ 3,342.74 per cleaning every 5 years				$ 668.55	$ 668.55	$ 668.55
Item 8.3 - Leachate Pump Replacement						
$ 2 pumps @	$ 3,066.36 per pump replaced every 5 years			$ 1,226.54	$ 1,226.54	$ 1,226.54
Annual Totals				$ 33,818.95	$ 30,891.15	$ 30,891.15
Number of Years				5	10	15
Sub-Total Post Closure Care Costs for Southern Unit						**$ 941,373.36**
Item 9 - Well Decommisioning						
Item 9.1 - Groundwater Well Decommision Cost						
15 Wells @	$522.30 per well =					$7,834.55
Item 9.2 - Dewatering Well Decommision Cost						
0 Wells @	$1,277.50 per well =					$0.00
Item 9.3 - Gas Probe Decommision Cost						
12 Wells @	$522.30 per well =					$6,267.64
Total Post Closure Care Costs for Southern Unit						**$ 955,475.55**

Table 4
Winnebago Landfill
Southern Unit Expansion
Premature Closure Cost Estimate

Component					Costs
Item 1 - Drainage Control					
Item 1.1 - Miscellaneous Backfill - Excavate, Haul, and Place	0 c.y. @	$	2.61	per c.y.	$ -
Item 1.2 - Clay Berm - Haul and Place	0 c.y. @	$	3.29	per c.y.	$ -
Item 2 - Final Cover					
Item 2.1 - Low Permeability Layer	21,135 c.y. @	$	3.29	per c.y.	$ 69,543.85
Item 2.2 - Protective Soil Layer	52,837 c.y. @	$	2.30	per c.y.	$ 121,425.77
Item 2.3 - Topsoil Layer	10,567 c.y. @	$	2.61	per c.y.	$ 27,596.77
Item 2.4 - 40 mil LDPE Geomembrane	570,636 s.f. @	$	0.42	per s.f.	$ 238,436.06
Item 2.5 - Geocomposite Drainage Layer	570,636 s.f. @	$	0.50	per s.f.	$ 286,123.27
Item 3 - Vegetation					
Item 3.1 - Fertilize, Seed and Mulch Landfill	6.54 ac @	$	1,253.53	per ac.	$ 8,198.07
Item 3.2 - Apply Topsoil to other Undeveloped Areas	4033.333 c.y. @	$	2.61	per c.y.	$ 10,533.12
Item 3.3 - Fertilize, Seed, and Mulch Undeveloped Areas	5 ac @	$	1,253.53	per ac.	$ 6,267.64
Item 4 - Gas Probes					
Item 4.1 - Install Additional Gas Monitoring Probes	0 probes @	$	1,149.07	$ / probe	$ -
Item 4.2 - Install Additional Ambient Air Monitor	0 monitor @	$	261.15	$ / monitor	$ -
Item 5 - Active Gas Management System					
Item 5.1 - Active Gas Well Installation	9 wells @ 70 ft. /well @	$	114.91	$ / ft.	$ 72,391.24
Item 5.2 - Install Additional Header Piping	3900 ft. @	$	36.04	$ / ft.	$ 140,555.81
Item 6 - Inspection and Certification					
Item 6.1 - Construction Engineering Inspection	13.1 ac @	$	9,401.46	$ / ac.	$ 123,159.12
Item 6.2 - Construction Acceptance Report	Lump Sum for Report				$ 32,905.11
Total Southern Unit Expansion Premature Closure Costs					**$ 1,137,135.84**

Table 5
Winnebago Landfill
Southern Unit Expansion
Post Closure Care Cost Estimate

Component	Costs		
	Yrs 1-5	Yrs 6 - 15	Yrs 16 - 30
Item 1 - Inspections			
Item 1.1 - Quarterly Inspections (Years 1-5) 0 hours / inspection @ $ 55.37 per hour *Included as part of South Unit Inspection	$ -		
Item 1.2 - Annual Inspections (Years 6-30) 0 hours / inspection @ $ 55.37 per hour *Included as part of South Unit Inspection		$ -	$ -
Item 2 - Cover Maintenance			
Item 2.1 - Cover Repair 31.59 acres @ 1 % @ 1ft. 510 c.y. 510 c.y. @ $ 2.30 per c.y.	$ 1,171.25	$ 1,171.25	$ 1,171.25
Item 3 - Vegetation Maintenance			
Item 3.1 - Vegetation Repair 31.59 acres @ 2 % @ $ 1,253.53 per ac.	$ 791.98	$ 791.98	$ 791.98
Item 4 - Mowing			
Item 4.1 - Annual Mowing 31.6 acres @ $ 33.17 per ac.	$ 1,047.77	$ 1,047.77	$ 1,047.77
Item 5 - Detection Groundwater Monitoring			
Item 5.1 - Routine Detection Monitoring Sampling Cost 0 hrs/well @ 0 wells = 0 hrs 0 hrs @ $ 33.17 per hr = $ - $ - per event x 3 events per year = $ -	$ -	$ -	$ -
Item 5.2 - Annual Detection Monitoring Sampling Cost 0 hrs/well @ 0 wells = 0 hrs 0 hrs @ $ 33.17 per hr = $ - $ - per event x 1 event per year = $ -	$ -	$ -	$ -
Item 5.3 - Routine Detection Monitoring Analytical Cost 0 wells @ $ 158.15 per well = $ - per qtr. $ - per qtr. X 3 qtrs per year = $ -	$ -	$ -	$ -
Item 5.4 - Annual Detection Monitoring Analytical Cost 0 wells @ $ 187.20 per well = $ - per qtr. $ - per qtr. X 1 qtrs per year = $ -	$ -	$ -	$ -

Table 5
Winnebago Landfill
Southern Unit Expansion
Post Closure Care Cost Estimate

Component	Costs		
	Yrs 1-5	Yrs 6 - 15	Yrs 16 - 30
Item 6 - Gas Monitoring			
Item 6.1 - Monthly Ambient Air Monitoring Cost 0.5 hrs/well @ 2 wells = 1 hrs 1 hrs @ $ 33.17 per hr = $ 33.17 $ 33.17 per event x 12 events per year = $ 398.01	$ 398.01		
Item 6.2 - Quarterly Ambient Air Monitoring Cost 0.5 hrs/well @ 2 wells = 1 hrs 1 hrs @ $ 33.17 per hr = $ 33.17 $ 33.17 per event x 4 events per year = $ 132.67		$ 132.67	$ 132.67
Item 6.3 - Monthly Gas Monitoring Cost 0 hrs/well @ 0 wells = 0 hrs 0 hrs @ $ 22.20 per hr = $ - $ - per event x 12 events per year = $ -	$ -		
Item 6.4 - Quarterly Gas Monitoring Cost 0 hrs/well @ 0 wells = 0 hrs 0 hrs @ $ 22.20 per hr = $ - $ - per event x 4 events per year = $ -		$ -	$ -
Item 6.5 - Gas System Maintenance 48 hrs @ $ 55.37 per hr	$ 2,657.68	$ 2,657.68	$ 2,657.68
Item 7 - Leachate Monitoring			
Item 7.1 - Semi-Annual Leachate Sampling Cost 1.5 hrs/well 0 well 0.0 hrs 0.00 hrs @ $33.17 per hr = $ - $ - per event x 2 events per year = $ -	$ -	$ -	$ -
Item 7.2 - Semi-Annual Leachate Monitoring Cost 0 wells @ $ - per well = $ - per event $ - per event X 2 events per year = $ -	$ -	$ -	$ -
Item 8 - Leachate Management			
Item 8.1 - Leachate Treatment 4,000 c.f. x 7.48 gal/c.f. = 29,920 gal. 29,920 gal @ 0.00204424 $/gal	$ 61.16	$ 61.16	$ 61.16
Item 8.2 - Leachate System Cleaning $ 3,342.74 per cleaning every 5 years	$ 668.55	$ 668.55	$ 668.55
Item 8.3 - Leachate Pump Replacement $ - pumps @ $ 3,066.36 per pump replaced every 5 years	$ -	$ -	$ -
Annual Totals	$ 6,796.40	$ 6,531.06	$ 6,531.06
Number of Years	5	10	15
Total Post Closure Care Cost for South Expansion Unit	$		**197,258.42**